

CLAIMS

I claim:

1 1. A generally cylindrical lift spacer for a vehicle coil
2 suspension, comprising:

3 an upper attachment plate configured as a flat ring
4 defining a central axis and having an outer edge defining an
5 outer diameter, an inner edge defining an inner diameter, an
6 upper surface, a lower surface and a securing bolt peripheral
7 portion;

8 a cylindrical lift member depending axially from said upper
9 attachment plate and having upper and lower edges, an inner
10 surface defining an inner diameter, and an outer surface
11 defining an outer diameter spaced inward from said outer edge of
12 said upper attachment plate so as to define a securing bolt
13 peripheral portion of said upper attachment plate;

14 a bearing plate depending axially from said cylindrical
15 lift member and configured as a flat ring having an outer edge
16 defining an outer diameter, an inner edge defining an inner
17 diameter, an upper surface, and a lower surface;

18 a cylindrical guide member depending axially from said
19 bearing plate and having upper and lower edges, an inner surface
20 defining an inner diameter, and an outer surface defining an
21 outer diameter; and

22 a plurality of securing bolts having threaded shafts
23 extending upward from said securing bolt peripheral portion of
24 said upper attachment plate;

25 said lift spacer having an inner diameter such as to
26 axially receive an axially mounted shock absorber;

27 said upper attachment plate outer diameter being such as to
28 fit within a coil receiver of the vehicle coil suspension;

29 said bearing plate having an outer diameter such that said
30 vehicle spacer rests on the coil of the vehicle coil suspension;

31 said cylindrical guide member having an outer diameter and
32 a vertical length such as to axially fit within the coil spring
33 of the vehicle coil spring and maintain said lift spacer in
34 alignment with the coil spring.

1 2. The lift spacer of claim 1, wherein said plurality of
2 securing bolts consists of three securing bolts.

1 3. The lift spacer of claim 2, said securing bolt
2 peripheral portion of said upper attachment plate defining three
3 equally spaced throughbores for receiving said securing bolts.

1 4. The lift spacer of claim 3, said securing bolts having
2 heads and threaded shafts, said shafts being inserted upwardly
3 through corresponding said throughbores.

1 5. The lift spacer of claim 4, said securing bolt heads
2 being welded to said lower surface of upper attachment plate.

1 6. The lift spacer of claim 5, said securing bolts having
2 securing nuts and washers, said shafts of said bolts being of
3 sufficient length as to extend through the upper spring receiver
4 and the shock tower mounts of the suspension and be secured by
5 said securing nuts and washers.

1 7. The lift spacer of claim 1, wherein said upper edge of
2 said lift member is welded to said lower surface of said upper
3 attachment plate.

1 8. The lift spacer of claim 7, wherein said inner diameter
2 of said lift member is greater than said inner diameter of said
3 upper attachment plate and said lift member is welded to said

4 upper attachment plate along the respective upper inner and
5 outer surfaces of said lift member at said upper edge thereof.

1 9. The lift spacer of claim 8, wherein said inner diameter
2 of said bearing plate is less than the inner diameter of said
3 lift member and said lift member is welded to said upper surface
4 of said bearing plate along the lower inner surface of said lift
5 member at said lower edge thereof.

1 10. The lift spacer of claim 9, wherein said inner
2 diameter of said guide member is less than the inner diameter of
3 said lift member and said guide member is welded to said lower
4 surface of said bearing plate along the upper inner surface of
5 said guide member at said upper edge thereof.

1 11. The lift spacer of claim 1, wherein the amount of lift
2 imparted to said suspension by said vehicle suspension lift
3 spacer is selectable by selecting a desired length between said
4 upper and lower edges for said lift member.

1 12. A generally cylindrical lift spacer for a vehicle coil
2 suspension, comprising:

3 an upper attachment plate configured as a flat ring
4 defining a central axis and having an outer edge defining an

5 outer diameter, an inner edge defining an inner diameter, an
6 upper surface, a lower surface and a securing bolt peripheral
7 portion;

8 a cylindrical lift member depending axially from said upper
9 attachment plate and having upper and lower edges, an inner
10 surface defining an inner diameter, and an outer surface
11 defining an outer diameter spaced inward from said outer edge of
12 said upper attachment plate so as to define a securing bolt
13 peripheral portion of said upper attachment plate;

14 a bearing plate depending axially from said cylindrical
15 lift member and configured as a flat ring having an outer edge
16 defining an outer diameter, an inner edge defining an inner
17 diameter, an upper surface, and a lower surface;

18 a cylindrical guide member depending axially from said
19 bearing plate and having upper and lower edges, an inner surface
20 defining an inner diameter, and an outer surface defining and
21 outer diameter; and

22 three equally spaced securing bolts having threaded shafts
23 extending upward from said securing bolt peripheral portion of
24 said upper attachment plate;

25 said securing bolt peripheral portion of said upper
26 attachment plate defining three equally spaced throughbores for
27 receiving said securing bolts;

28 said securing bolts having heads and threaded shafts, said
29 shafts being inserted upwardly through corresponding said
30 throughbores;

31 said lift spacer having an inner diameter such as to
32 axially receive an axially mounted shock absorber;

33 said upper attachment plate outer diameter being such as to
34 fit within a coil receiver of the vehicle coil suspension;

35 said bearing plate having an outer diameter such that said
36 vehicle spacer rests on the coil of the vehicle coil suspension;

37 said cylindrical guide member having an outer diameter and
38 a vertical length such as to axially fit within the coil spring
39 of the vehicle coil spring and maintain said lift spacer in
40 alignment with the coil spring.

1 13. The lift spacer of claim 12, said securing bolt heads
2 being welded to said lower surface of upper attachment plate.

1 14. The lift spacer of claim 5, said securing bolts having
2 securing nuts and washers, said shafts of said bolts being of

3 sufficient length as to extend through the upper spring receiver
4 and the shock tower mounts of the suspension and be secured by
5 said securing nuts and washers.

1 15. The lift spacer of claim 12, wherein the amount of
2 lift imparted to said suspension by said vehicle suspension lift
3 spacer is selectable by selecting a desired length for said lift
4 member.

1 16. The lift spacer of claim 12, wherein each of said
2 upper attachment plate and said bearing plate has a thickness of
3 about 1/4 inches, their respective diameters are about 6 1/2
4 inches, and their inner diameters are about 3 to about 3 1/2
5 inches.

1 17. The lift spacer of claim 16, wherein said guide member
2 is about 1 3/8 inches in length, having a wall about 1/8 inch in
3 thickness and an inner diameter of at least 3 inches.

1 18. The lift spacer of claim 17, wherein said lift member
2 has a wall about 3/16 inches in thickness.

1 19. A method of making a generally cylindrical lift spacer
2 for a vehicle coil suspension, comprising the steps of:

3 cutting a flat ring from flat metal stock to form an upper
4 attachment plate;

5 drilling three equally spaced throughbores proximate the
6 perimeter of said attachment plate;

7 cutting a flat ring from flat metal stock to form a bearing
8 plate;

9 cutting a cylindrical segment from cylindrical metal stock
10 to form a lift member;

11 cutting a cylindrical segment from cylindrical metal stock
12 to form a guide member;

13 axially aligning said lift member on said attachment plate
14 and welding said lift member to said attachment plate;

15 axially aligning said bearing plate on said lift member and
16 welding said bearing plate to said lift member;

17 axially aligning said guide member on said bearing plate
18 and welding said guide member to said lift member; and

19 inserting three securing bolts upward through respective
20 said throughbores defined by said attachment plate and welding
21 the heads of said securing bolts to said attachment plate.